

Amendment Dated September 5, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) An electric field control material including a polymer matrix in which is dispersed a so-called non-linear filler having non-linear electric resistance properties, ~~characterized in that~~ wherein the non-linear filler includes at least 97% by weight of zinc oxide as a homogeneous powder, and less than 3% by weight of at least one metal oxide as traces.

2. (currently amended) The material according to claim 1, ~~characterized in that~~ wherein the non-linear filler includes less than 99.8% by weight of the zinc oxide as a homogenous powder.

3. (currently amended) The material according to ~~any of claim[[s]] 1 or 2,~~ ~~characterized in that~~ wherein the grains composing the zinc oxide powder of the non-linear filler have dimensions in majority less than 50 μm , ~~and preferably less than 10 μm .~~

4. (currently amended) The material according to ~~any of claim[[s]] 1 to 3,~~ ~~characterized in that~~ wherein each metal oxide is selected from the group consisting of lead oxide, cadmium oxide, iron(III) oxide, copper oxide and manganese oxide.

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5. (currently amended) The material according to ~~any of claim[[s]] 1 to 4,~~
~~characterized in that~~ wherein the zinc oxide of the non-linear filler is doped with at least one
non-metal element.

6. (currently amended) The material according to claim 5, ~~characterized in that~~
wherein each non-metal element is sulphur or boron.

7. (currently amended) The material according to ~~any of claim[[s]] 1 to 6,~~
~~characterized in that~~ wherein it includes a so-called linear filler having linear electric resistance
properties.

8. (currently amended) The material according to claim 7, ~~characterized in that~~
wherein the volume of the linear filler accounts for less than 25% of the volume of the non-linear
filler.

9. (currently amended) The material according to ~~any of claim[[s]] 1 to 8,~~
~~characterized in that~~ wherein it includes an insulating filler.

10. (currently amended) The material according to claim[[s]] 9, ~~characterized in that~~
wherein the insulating filler accounts for less than 10% by volume of said material.

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11. (currently amended) The material according to ~~any of claim~~[[s]] 1 ~~to 10~~, ~~characterized in that~~ wherein the non-linear or the combination of the non-linear and ~~and if~~ necessary the linear filler volume substantially accounts for 5 to 60% of the volume of said material, ~~preferably from 15 to 40% by volume.~~

12. (currently amended) The material according to ~~any of claim~~[[s]] 1 ~~to 11~~, ~~characterized in that~~ wherein the zinc oxide has a direct current resistivity which is less than 10^9 $\Omega\cdot m$ ~~and preferably less than 10^8 $\Omega\cdot m$.~~

13. (currently amended) A termination [[(1)]] for an electric cable [[(2)]], ~~characterized in that~~ wherein it includes at least one electric field distributor element [[(3)]], ~~consisting of~~ including a material according to ~~any of the preceding claim~~[[s]] 1.

14. (currently amended) A connecting device for electrical cables, ~~characterized in that~~ wherein it includes at least one electric field distributor element ~~consisting of~~ including a material according to ~~any of claim~~[[s]] 1 ~~to 12~~.

15. (currently amended) A current limiting device, ~~characterized in that~~ wherein it includes at least one PTC effect element, ~~consisting of~~ including a material according to ~~any of claim~~[[s]] 1 ~~to 12~~.

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16. (currently amended) A power cable, ~~characterized in that~~ wherein it includes at least one electric field distributor element ~~consisting of~~ including a material according to ~~any of~~ claim[[s]] 1 ~~to 12~~.

17. (currently amended) Self-regulating heating cable, ~~characterized in that~~ wherein it includes at least one PTC effect heating element ~~consisting of~~ including a material according to ~~any of~~ claim[[s]] 1 ~~to 12~~.

18. (new) The material according to claim 3, wherein the grains composing the zinc oxide powder of the non-linear filler have dimensions in majority less than 10 μm .

19. (new) The material according to claim 11, wherein the non-linear or the combination of the non-linear and the linear filler volume substantially accounts for 15 to 40% of the volume of said material.

20. The material according to claim 12, wherein the zinc oxide has a direct current resistivity which is less than $10^8 \Omega\cdot\text{m}$.